

LDK 5302/60

2 inch HDTV Viewfinder



User's Guide



3922 496 49001 v02

Declaration of Conformity

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- EN60065 : Safety
- EN55103-1 : EMC (Emission)
- EN55103-2 : EMC (Immunity)

following the provisions of:

- a. the Safety Directives 73/23/EEC and 93/68/EEC
- b. the EMC Directives 89/336/EEC and 93/68/EEC

FCC Class A Statement

This product generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause interference to radio communications.

It has been tested and found to comply with the limits for a class A computing device pursuant to Subpart J of part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

Operation of this product in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

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LDK5302/60 2 inch HDTV Viewfinder

User's Guide

The 2 Inch HDTV Viewfinder (LDK 5302/60) is a viewfinder for use with LDK 6000HD series cameras.

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About This Manual

Purpose of this manual

The purpose of this manual is to present a global description of how to operate the viewfinder. Consult the Operator's manual of your camera as required during and after the installation process.

This manual is an integral part of the service policy. It ensures that you will be able to install your viewfinder to meet the requirements of your environment. The manual provides first line service information so that suitably qualified service personnel can detect and repair faults, normally by module replacement.

Because of the complexity of some of the components, second line service can only be carried out at the specially equipped service centres and information concerning second line maintenance is not supplied in this manual.

Intended audience

The manual is intended as a guide to those with a working knowledge of camera systems and installation techniques. The first line detection and repair of faults requires a general knowledge of test and measurement techniques. The guide is so designed that it can be used as well to the viewfinder, as well a simple procedural guide to those who wish to setup and start shooting immediately, and as a reference work to be consulted as required during the long life of the viewfinder.

Service policy

The LDK5302/60 is a sophisticated HDTV viewfinder containing state-of-the-art electronic components which are designed to provide long-life operation without the need for maintenance. With this in mind, the service policy of Thomson Multimedia Broadcast Solutions endeavours to ensure that help will be quickly on hand in the unlikely event of anything going wrong. The guiding principles of the Thomson Multimedia Broadcast Solutions first line maintenance philosophy are speed and cost effectiveness. First line maintenance is dedicated to keeping your viewfinder operational, despite a fault, by replacement boards and the replacement of minor mechanical parts by the user.

CAUTION

Without additional protection the LDK5302/60 is protected according to safety specification EN60529 up to level IPX3 (spraying water).

Exposure to splashing or jetting water can result in harmful effects.

Optional accessories

- Wide angle eyepiece (LDK 5390/00)
- Left eye adaptor (LDK 5390/10)

Packing/Unpacking

Inspect the shipping container for evidence of damage immediately after receipt. If the shipping container or cushioning material is damaged, it should be kept until the contents of the shipment have been checked for completeness and the units have been checked mechanically and electrically.

The contents of the shipment should be checked against the packing list. If the contents are incomplete, if there is mechanical damage or defect, or if the units do not perform correctly when unpacked, notify your Thomson Multimedia Broadcast Solutions sales or service centre within eight days. If the shipping container shows signs of damage or stress, notify the carrier as well.

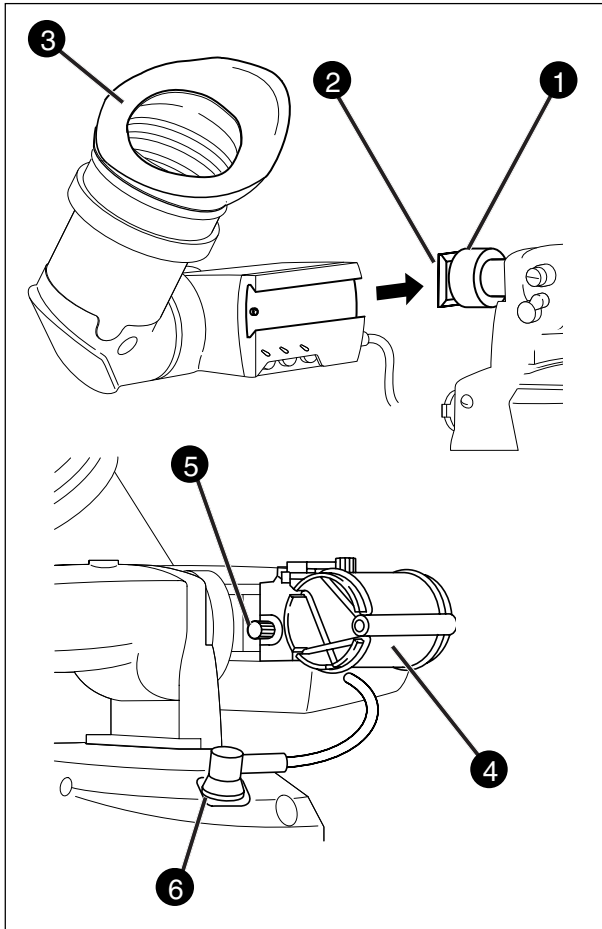
If a unit is being returned to Thomson Multimedia Broadcast Solutions for servicing, try to use the containers and materials of the original packaging. Attach a tag indicating the type of service required, return address, model number, full serial number and the return number which will be supplied by your Thomson Multimedia Broadcast Solutions service centre.

If the original packing can no longer be used, the following general instructions should be used for repacking with commercially available materials:

- Wrap unit in heavy paper or plastic.
- Use strong shipping container.
- Use a layer of shock-absorbing material around all sides of the unit to provide firm cushioning and prevent movement inside container.
- Seal shipping container securely.
- Mark shipping container FRAGILE to ensure careful handling.

Installation

Mounting the 2-inch viewfinder and microphone holder



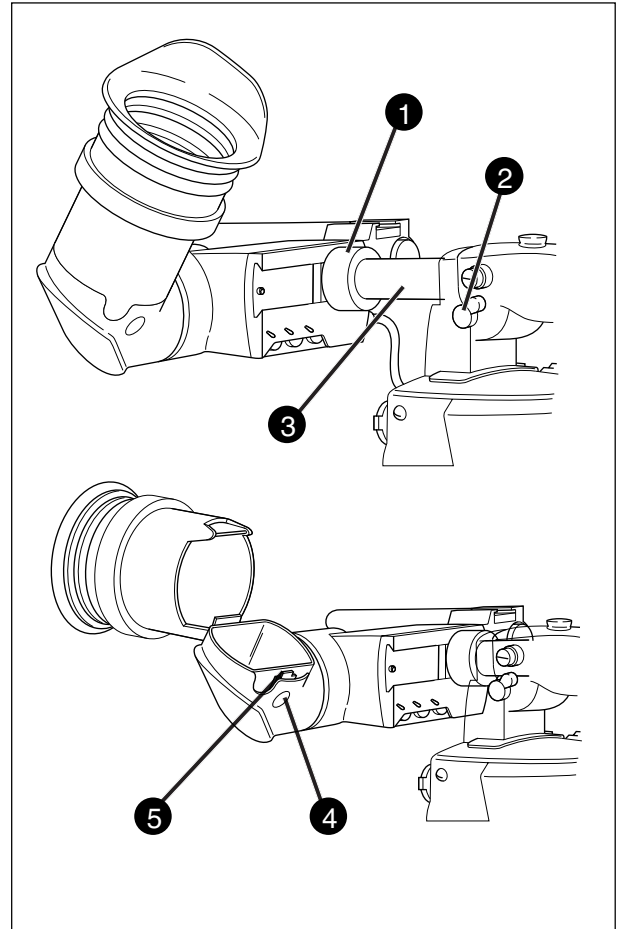
- To mount the 2-inch viewfinder proceed as follows:
- Loosen locking ring (1) of viewfinder support bracket (2) at the front of the camera handle. (As seen from the rear of the camera, turning the locking ring counterclockwise moves it towards the handle.)
 - Slide the viewfinder onto the viewfinder support bracket.
 - Tighten the locking ring (1) by turning it clockwise (as seen from rear) so that the viewfinder is mounted securely to the support.
 - Connect the viewfinder cable to the viewfinder connector socket (6) at the top right of the camera.
 - Slide the microphone holder (4) onto the viewfinder and secure with the knurled screw (5).

CAUTION

Always fit the microphone holder (4) as it functions as a safety stop for the viewfinder.

- To improve the comfort of the skin contact when using the viewfinder, fit the eye piece cover (3) to the rubber eyepiece. Spare eye piece covers (3922 405 00461) are available at your Thomson Multimedia Broadcast Solutions representative.

Positioning the 2-inch viewfinder



The horizontal position of the viewfinder can be adjusted as follows to suit your requirements:

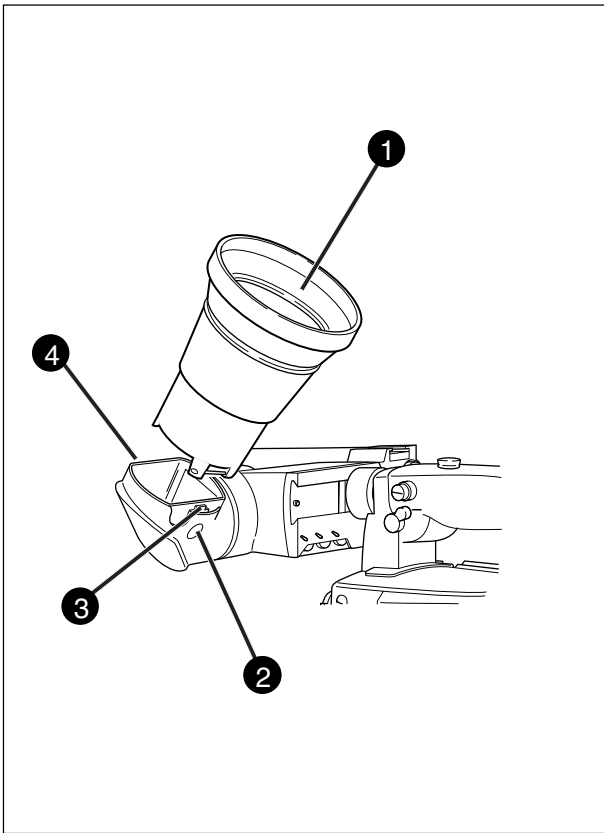
- Loosen the locking ring (1). (As seen from the rear of the camera, turning the locking ring counterclockwise moves it towards the handle.)
- Slide the viewfinder horizontally along the rail to the desired position.
- Tighten the locking ring (1) by turning clockwise.

The dioptre hood and eyepiece of the viewfinder can be rotated vertically.

The viewfinder can be positioned backwards and forwards along the camera axis. Loosen the support bracket round bar retaining lever (2) and slide the round bar (3) forwards or backwards. When the desired position is reached tighten the support bracket round bar retaining lever (2) again.

To use the viewfinder at a distance press the button (4) below or above the eyepiece tube and swing it free of the associated clip (5). The display can now be seen from further away.

Wide angle eyepiece

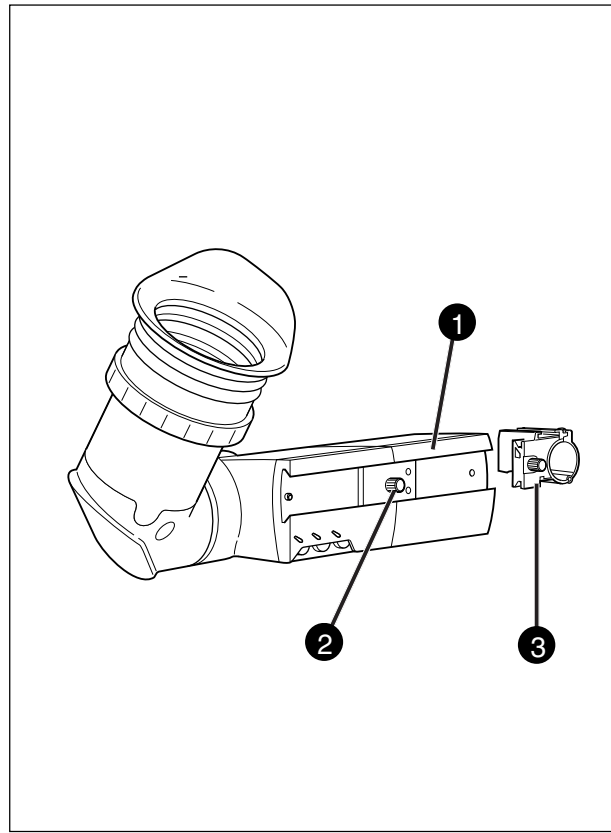


If you regularly use the viewfinder at a distance, for example, when you use the camera in the hand-held position, it is recommended that you fit the optionally available wide angle eyepiece (LDK 5390/00).

To fit the wide angle eyepiece proceed as follows:

- a. Hold the eyepiece **(1)** securely.
- b. Press the button **(2)** below the eyepiece tube and swing it free of the button clip **(3)**.
- c. Press the button **(4)** above the eyepiece tube and remove the eyepiece.
- d. Fit the wide angle eyepiece **(1)** to the two clips **(3)** ensuring that they both click into place.

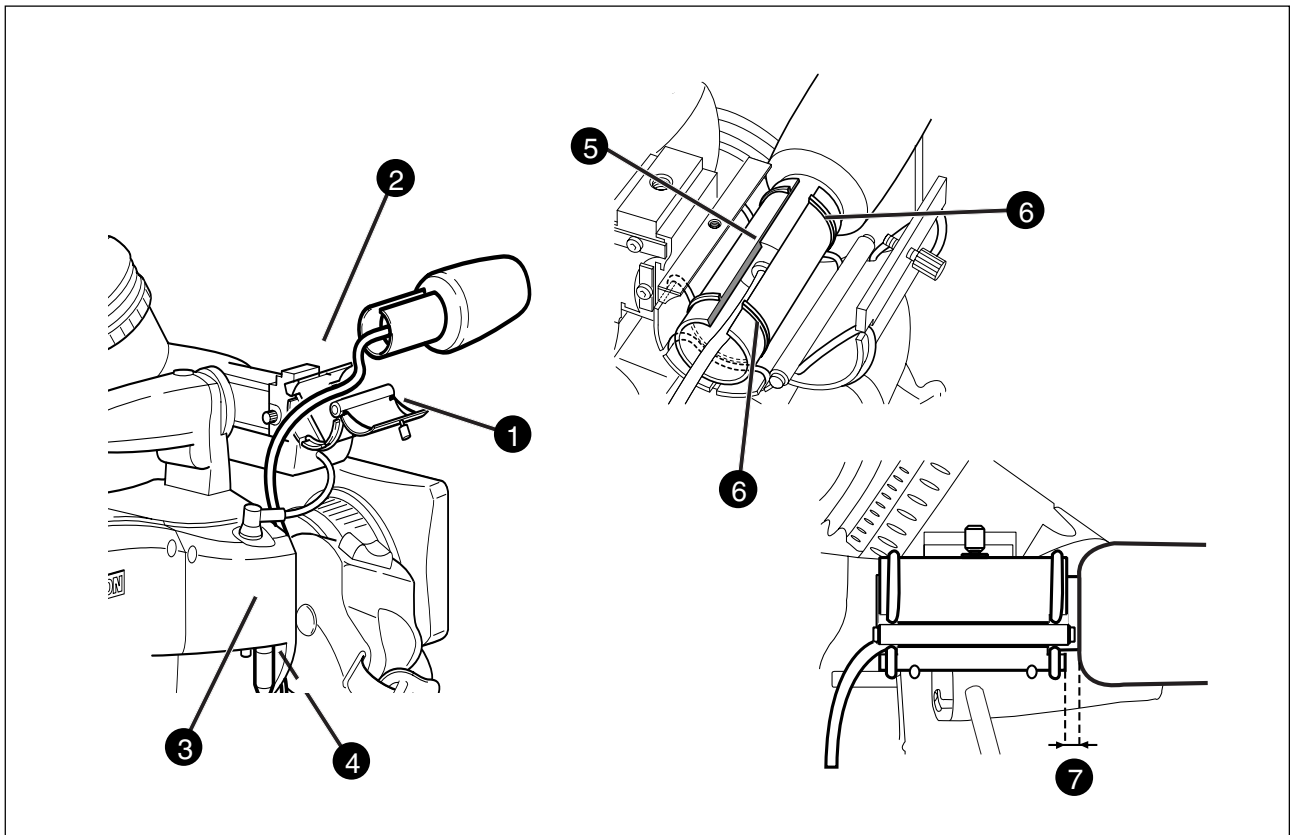
Left eye adapter



A left eye adapter is optionally available (LDK 5390/10) to allow the viewfinder to be used with the left eye.

Before mounting the viewfinder onto the camera, attach the left eye adapter **(1)** to the viewfinder and secure it using the screw **(2)**. Do not forget to mount the microphone support bracket **(3)** at the end of the left eye adapter.

Microphone



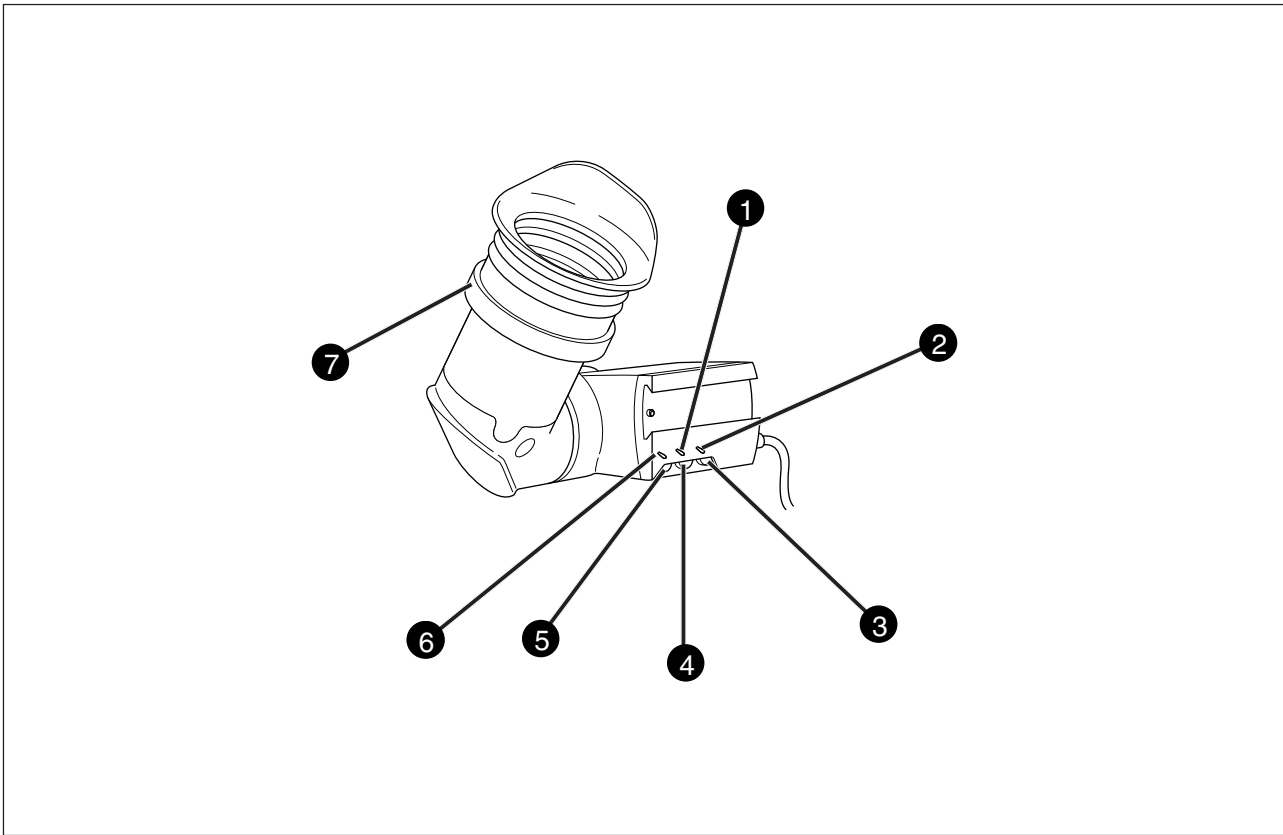
To attach the optional microphone (AJ MC700) to the camera proceed as follows:

- Open the microphone holder by unscrewing the knurled screw **(1)** of the microphone support bracket **(2)** on the viewfinder and open.
- Slide the microphone into the split tube until the microphone shoulder reaches the mark **(5)** in the tube.
- Place the tube with the microphone into the holder with the split facing upwards.
- Ensure that the rubber supports at the back and front of the holder fit into the rims **(6)** around the tube.
- Close the holder and tighten the knurled screw at the top.
- Connect the microphone cable to audio connector **(3)** (mic) on the right side of the camera.
- Place the microphone cable into the top clip at the front of the camera and into clip **(4)** at the side of the camera. (Pull and twist clip **(4)** to open it.)

Other microphones with a diameter of 21mm can also be used, however, ensure that the phantom power and the sensitivity of the input that match that type of microphone are correctly selected in the camera systems menu. Refer to Section 6 for more information on selecting the audio inputs and controlling the audio level.

Note:

- When longer microphones are used, it is not necessary to place them in the split tube.
- For optimum operation, the microphone should be mounted as straight as possible.
- Don't allow the wind hood to touch the holder **(7)** as this reduces the damping effect.
- By placing the split facing upwards, the microphone cable does not touch the holder thus avoiding mechanical pick-up.
- The microphone can also be connected to the rear of the Triax adapter where a switch selects the input. Refer to Operator's Guide Triax adaptor for more information on connecting the microphone to the rear connector.



1 Zebra switch

This switch disables (OFF position) or enables the zebra pattern in the viewfinder which indicates high video levels. Values for the zebra function are selected in the VF menu. (The zebra pattern is switched off when the skin view is on.)

2 Option switch

This switch is included on the viewfinder to allow future features to be incorporated.

3 Brightness control

Use this rotary control to adjust the brightness of the viewfinder display to suit your needs.

4 Contrast control

Use this rotary control to adjust the contrast of the viewfinder display to suit your needs.

5 Crispening control

This rotary control adjusts the sharpness of the picture displayed in the viewfinder. Reduce the crispening for a better picture when the gain is set to +++.

6 Tally switch

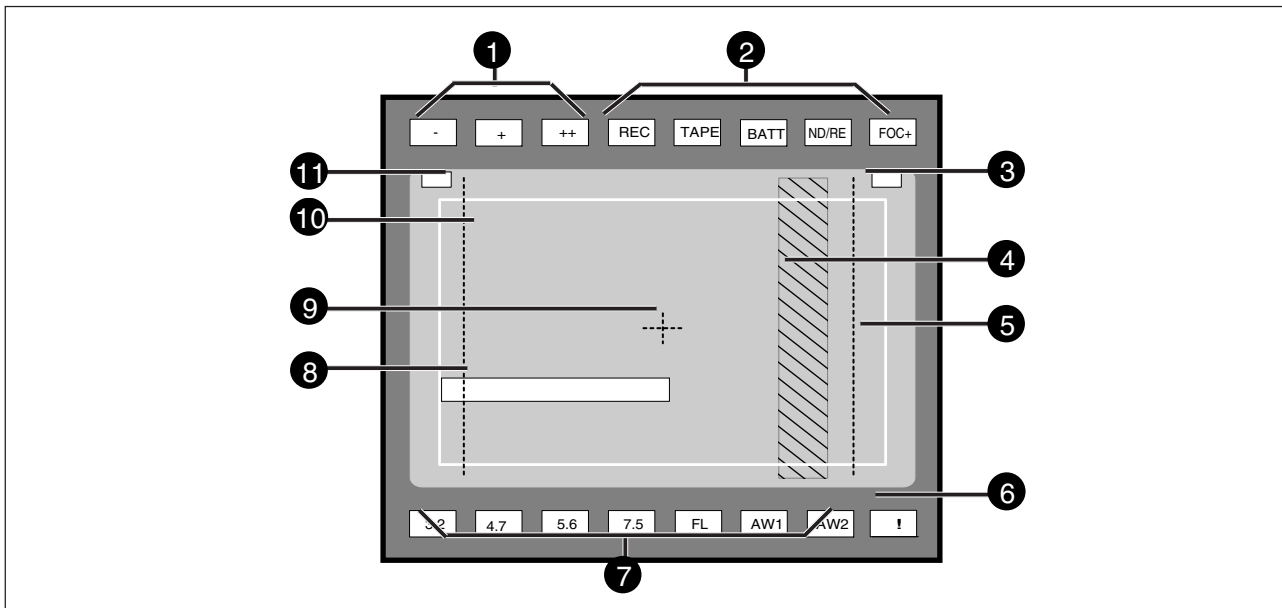
The tally switch is used to control the tally indicators at the front of the viewfinder and at the rear of the carrying handle.

When this switch is set to the ON position, the tally indicators light when the camera is on-air. When this switch is set to the OFF position, the tally indicators do not light when the camera is on-air.

7 Dioptre

The dioptre of the viewfinder can be adjusted to suit your eyesight by turning the dioptre ring. The range of the dioptre is +3 to -3.

Viewfinder Indicators



1 Gain indicators

The gain indicators in the viewfinder light as follows:

- Gain is - (-3, -6dB)
- + Gain is + (+3, +6, +9dB)
- ++ Gain is ++ (+6, +9, +12dB)
- + and ++ Gain is +++ (+12dB)

2 Top indicators

REC lights when the camera is on-air.

TAPE lights when the studio ISO signal is received.

BATT lights if the supply voltage is less than 11V.

ND/RE lights when an ND optical filter or the lens range extender is selected.

FOC+ lights when the focus assist function is on.

3 Iris indication

Indicates the value of the iris opening (when enabled in the VF menu).

4 Zebra pattern

This diagonal line pattern warns the operator that the area affected has risen above a predetermined level of the full scale video exposure value. Level and contrast are selected in the VF menu.

5 Safe area marker

The safe area marker indicates an area that represents 80% of the whole viewfinder picture area. This is the minimum area seen on a TV-set.

6 Non standard indicator

The non-standard video settings indicator (!) lights when exposure is not set to nominal. It also lights

when black stretch or extended iris is on.

7 White Balance indicators

The white balance indicators light as follows:

- 3,2 - preset temperature of 3200K is selected
- 4,7 - preset temperature of 4700K is selected
- 5,6 - preset temperature of 5600K is selected
- 7,5 - preset temperature of 7500K is selected
- FL - memory for fluorescent light is selected
- AW1 - memory 1 is selected
- AW2 - memory 2 is selected

None of these indicators light if AWC is selected.

8 Message box

The display time of this information message box is set by the Info time item of the VF menu.

9 Centre marker

This cross marks the centre of the picture.

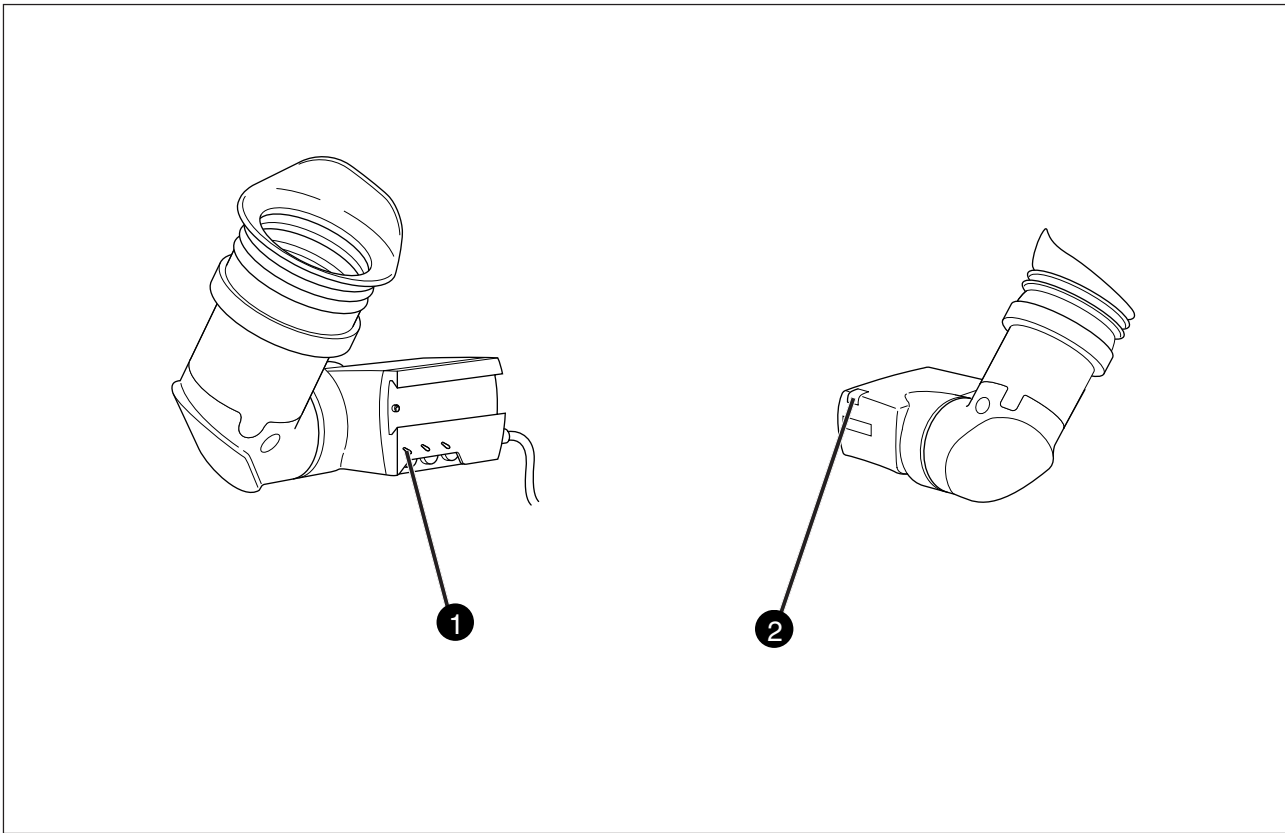
10 Cadre marker (only switchable cameras)

These dotted white lines show the limits of a 4:3 picture, or the limits of a 14:9 picture.

11 Zoom indication

Indicates the degree to which the lens has been zoomed in or out if this feature is supported by the lens. It shows 50 if not supported.

Monitoring Functions



1 Tally switch

The tally switch is used to control the tally indicators at the front of the viewfinder and at the rear of the carrying handle.

When this switch is set to the ON position, the tally indicators light when the camera is on-air.

When this switch is set to the OFF position, the tally indicators do not light when the camera is on-air.

2 Tally indicators (red)

The red tally indicators at the front of the viewfinder and at the rear of the carrying handle light to indicate that the camera is on-air. They do not light when the camera is on-air if the tally switch is set to the OFF position.

Connectors and Cables

Viewfinder connector

